ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE 2634 August 4, 2000 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT DATE NAME CLASS SUB-MILLANE **FILING DATE NUMBER** CLASS AA1 2,057,613 10/1936 250 8 Gardner AB1 2.241.078 05/1941 Vreeland 179 15 AC1 179 2,270,385 01/1942 Skillman 15 AD1 2,283,575 05/1942 Roberts 250 6 AE1 2,358,152 09/1944 Earp 179 171.5 AF1 2,410,350 10/1946 Labin et al. 179 15 AG1 2,451,430 10/1948 Barone 250 8 AH1 2,462,069 02/1949 Chatterjea et al. 250 17 Al1 2,462,181 02/1949 Grosselfinger 250 17 FÓREIGN PATENT DOCUMENTS **EXAMINER** INITIAL **DOCUMENT NUMBER** COUNTRY DATE CLASS SUB-TRANSLATION **CLASS** AJ1 DE 42 37 692 C1 03/1994 DE H04B 1/26 No AK1 EP 0 035 166 A1 09/1981 EP H04B 1/26 No AL1 EP 0 193 899 B1 06/1990 EΡ 7/52 G01S N/A AM₁ EP 0 380 351 A2 08/1990 H03H 17/04 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Aghvami, H. et al., "Land Mobile Satellites Using the Highly Elliptic Orbits- The UK T-SAT Mobile Payload," AN Fourth International Conference on Satellite Systems for Mobile Communications and Navigation, IEE, pp. 147-1 153 (October 17-19, 1988). Akers, N.P. et al., "RF Sampling Gates: a Brief Review," IEE Proceedings, IEE, Vol. 133, Part A, No. 1, pp. 45-AO 1 49 (January 1986). أبعر Al-Ahmad, H.A.M. et al., "Doppler Frequency Correction for a Non-Geostationary Communications Satellite. Techniques for CERS and T-SAT," Electronics Division Colloquium on Low Noise Oscillators and Synthesizers, ΑP 1 IEE, pp. 4/1-4/5 (January 23, 1986). Ali, I. et al., "Doppler Characterization for LEO Satellites," IEEE Transactions on Communications, IEEE, Vol. AQ 1 46, No. 3, pp. 309-313 (March 1998). Allan, D.W., "Statistics of Atomic Frequency Standards," Proceedings Of The IEEE Special Issue on Frequency AR 1 Stability, IEEE, pp. 221-230 (February 1966). DATE CONSIDERED **EXAMINER** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant. ::ODMANHODMANSKGF_DC1;32488;1

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	AO	2	Allstot, D.J. and Black Jr. W.C., "Technological Design Considerations for Monolithic MOS Switched-Capacitor Filtering Systems," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 967-986 (August 1983).											
	АР	<u>2</u>	Alouini, M. et al., "Channel Characterization and Modeling for Ka-Band Very Small Aperture Terminals," Proceedings Of the IEEE, IEEE, Vol. 85, No. 6, pp. 981-997 (June 1997).											
	ΑQ	2	Propagation is	Andreyev, G.A. and Ogarev, S.A., "Phase Distortions of Keyed Millimeter-Wave Signals in the Case of Propagation in a Turbulent Atmosphere," <i>Telecommunications and Radio Engineering</i> , Scripta Technica, Vol. 43, No. 12, pp. 87-90 (December 1988).										
(C.	AR	<u>2</u>					mpling in the Picosecond p. 211-214 (May 1977).	Range," O	ptics Co	ommunicatio	ns, North-Holland			
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APPLICATION NO. ATTY. DOCKET NO. 09/632,856 1744.0630003 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER FILING DATE** CLASS SUB-DATE DOCUMENT NAME INITIAL CLASS NUMBER 332 22 01/1964 10 AA3 King et al. 3,118,117 40 12/1965 McNair 325 AB3 3,226,643 Shepherd 325 145 AC3 06/1966 3,258,694 325 163 05/1968 Sanders AD3 3,383,598 AE3 05/1968 Miyagi 325 30 3,384,822 66 178 07/1969 Perreault AF3 3,454,718 347 AG3 08/1970 Pierret 340 3,523,291 332 9 **АНЗ** 12/1970 Maxey 3,548,342 325 320 01/1971 Perreault AI3 3,555,428 **FOREIGN PATENT DOCUMENTS EXAMINER CLASS** SUB-TRANSLATION **DOCUMENT NUMBER** COUNTRY INITIAL DATE CLASS 7/01 N/A HQ4N AJ₃ EP 0 423 718 A2 04/1991 EP 7/01 N/A H04N 08/1992 EP AK3 EP 0 423 718 A3 H₀3D 3/00 N/A EP 0 486 095 A1 05/1992 EP AL₃ N/A **H03D** 3/00 AM3 EP 0 486 095 B1 02/1997 EP OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Austin, J. et al., "Doppler Correction of the Telecommunication Payload Oscillators in the UK T-SAT," 18th European Microwave Conference, Microwave Exhibitions and Publishers Ltd., pp. 851-857 (September 12 - 15, AN 3 1988). Auston, D.H., "Picosecond optoelectronic switching and gating in silicon," Applied Physics Letters, American AO <u>3</u> Institute of Physics, Vol. 26, No. 3, pp. 101-103 (February 1, 1975). Baher, H., "Transfer Functions for Switched-Capacitor and Wave Digital Filters," IEEE Transactions on Circuits AP 3 and Systems, IEEE Circuits and Systems Society, Vol. CAS-33, No. 11, pp. 1138-1142 (November 1986). Baines, R., "The DSP Bottleneck," IEEE Communications Magazine, IEEE Communications Society, pp. 46-54 AQ <u>3</u> (May 1995). Banjo, O.P. and Vilar, E., "Binary Error Probabilities on Earth-Space Links Subject to Scintillation Fading," *Electronics Letters*, IEE, Vol. 21, No. 7, pp. 296-297 (March 28, 1985). AR <u>3</u> **DATE CONSIDERED EXAMINER** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 4 of 56 ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 U.S. PATENT DOCUMENTS **EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-**FILING DATE** NUMBER CLASS AA4 3,617,892 11/1971 Hawley et al. 325 145 AB4 3,621,402 11/1971 Gardner 328 37 AC4 3,623,160 11/1971 Giles et al. 340 347 DA AD4 3,626,417 12/1971 Gilbert 343 203 AE4 3,629,696 12/1971 **Bartelink** 324 57 R AF4 3,662,268 05/1972 Gans et al. 325 56 AG4 3,689,841 09/1972 Bello et al. 325 39 AH4 3,714,577 01/1973 Hayes 325 145 Al4 3,717,844 02/1973 Barret et al. 340 5 R **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ4 EP 0 512 748 A2 11/1992 EP H04N 9/64 N/A AK4 EP 0 512 748 A3 07/1993 EP H04N 9/64 N/A A1 4 EP 0 512 748 B1 11/1998 EP H04N 9/64 N/A AM4 EP 0 548 542 A1 06/1993 EP **H03B** 19/14 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Banjo, O.P. and Vilar, E., "The Dependence of Slant Path Amplitude Scintillations on Various Meteorological AN Parameters," Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation, IEE, 4 pp. 277-280 (March 30 - April 2, 1987). Banjo, O.P. and Vilar, E. "Measurement and Modeling of Amplitude Scintillations on Low-Elevation Earth-Space Paths and Impact on Communication Systems," *IEEE Transactions on Communications*, IEEE Communications Society, Vol. COM-34, No. 8, pp. 774-780 (August 1986). AO 4 Banjo, O.P. et al., "Tropospheric Amplitude Spectra Due to Absorption and Scattering in Earth-Space Paths," AP 4 Fourth International Conference on Antennas and Propagation (ICAP 85), IEE, pp. 77-82 (April 16-19, 1985). Basili, P. et al., "Case Study of Intense Scintillation Events on the OTS Path." IEEE Transactions on Antennas AQ 4 and Propagation, IEEE, Vol. 38, No. 1, pp. 107-113 (January 1990).

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DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Letters, IEE, Vol. 24, No. 17, pp. 1114-1116 (August 18, 1988).

Basili, P. et al., "Observation of High C2 and Turbulent Path Length on OTS Space-Earth Link," Electronics

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME CLASS SUB-FILING DATE NUMBER **CLASS** AA5 3,735,048 05/1973 Tomsa et al. 15 BM 179 AB5 3,806,811 04/1974 Thompson 325 146 AC5 3,868,601 02/1975 MacAfee 332 45 AD5 3,949,300 04/1976 Sadler 325 31 AE5 3,967,202 06/1976 Batz 325 31 AF5 3,980,945 09/1976 **Bickford** 325 30 AG5 3,987,280 10/1976 Bauer 235 150.53 AH5 3,991,277 11/1976 Hirata 179 15 FD AI5 4,003,002 01/1977 Snijders et al. 332 10 **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ5 EP 0 632 288 A2 01/1995 EΡ 13/75 **G01S** N/A AK5 EP 0 632 288 A3 07/1996 FP G01S 13/75 N/A AL5 EP 0 696 854 A1 ΕP 02/1996 H04B 1/26 N/A AM5 EP 0 782 275 A2 07/1997 EΡ 7/02 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Blakey, J.R. et al., "Measurement of Atmospheric Millimetre-Wave Phase Scintillations in an Absorption AN <u>5</u> Region," Electronics Letters, IEE, Vol. 21, No. 11, pp. 486-487 (May 23, 1985). Burgueño, A. et al., "Influence of rain gauge integration time on the rain rate statistics used in microwave AO <u>5</u> communications," annales des télécommunications, International Union of Radio Science, pp. 522-527 (September/October 1988). Burgueño, A. et al., "Long-Term Joint Statistical Analysis of Duration and Intensity of Rainfall Rate with Application to Microwave Communications," Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation, IEE, pp. 198-201 (March 30 - April 2, 1987). AP <u>5</u> Burgueño, A. et al., "Long Term Statistics of Precipitation Rate Return Periods in the Context of Microwave Communications," Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, AQ <u>5</u> IEE, pp. 297-301 (April 4-7, 1989). Burgueño, A. et al., "Spectral Analysis of 49 Years of Rainfall Rate and Relation to Fade Dynamics," IEEE AR <u>5</u> Transactions on Communications, IEEE Communications Society, Vol. 38, No. 9, pp. 1359-1366 (September

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** INITIAL DATE FILING DATE NAME CLASS SUB-NUMBER **CLASS** AA6 4,013,966 03/1977 363 325 Campbell AB6 4,019,140 04/1977 Swerdlow 322 65 AC6 4,035,732 07/1977 Lohrmann 325 446 AD6 4,047,121 09/1977 Campbell 331 76 AE6 4,066,841 01/1978 Young 178 66 R AF6 4,066,919 01/1978 Huntington 307 353 AG6 Batz 4,081,748 03/1978 325 56 AH₆ 4,130,765 12/1978 Arakelian et al. 307 220 R Van Gerwen et al. AI6 4,130,806 12/1978 325 487 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ6 EP 0 785 635 A1 07/1997 EP H04B 1/713 No AK6 EP 0 795 978 A2 09/1997 EP H04L 5/06 N/A AL6 EP 0 837 565 A1 04/1998 EP H04B 1/69 N/A AM6 EP 0 862 274 A1 09/1998 EP нозм 1/06 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Catalan, C. and Vilar, E., "Approach for satellite slant path remote sensing," Electronics Letters, IEE, Vol. 34, AN <u>6</u> No. 12, pp. 1238-1240 (June 11, 1998). Chan, P. et al., "A Highly Linear 1-GHz CMOS Downconversion Mixer," European Solid State Circuits Conference, IEEE Communication Society, pp. 210-213 (September 22-24, 1993). AO <u>6</u> Copy of Declaration of Michael J. Bultman filed in patent application Ser. No. 09/176,022, which is directed to AP 6 related subject matter, 2 pages. Copy of Declaration of Robert W. Cook filed in patent application Ser. No. 09/176,022, which is directed to AQ <u>6</u> related subject matter, 2 pages. Copy of Declaration of Alex Holtz filed in patent application Ser. No. 09/176,022, which is directed to related AR <u>6</u> subject matter, 3 pages. **EXAMINER** DATE CONSIDERED 11 EXAMINER: Initial If reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE **GROUP** August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE **CLASS** NAME SUR-FILING DATE NUMBER CLASS AA7 4,142,155 02/1979 Adachi 47 325 AB7 4,170,764 10/1979 17 Salz et al. 332 AC7 4,204,171 05/1980 328 167 Sutphin, Jr. AD7 4.210.872 07/1980 Gregorian 330 9 AE7 4,245,355 01/1981 Pascoe et al. 455 326 AF7 4,253,066 02/1981 Fisher et al. 329 50 AG7 4,253,069 02/1981 Nossek 330 107 AH7 4,308,614 12/1981 Fisher et al. 370 119 AI7 4.320.361 03/1982 **Kikkert** 332 16 R **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-TRANSLATION CLASS AJ7 EP 0 874 499 A2 10/1998 H04L 25/06 N/A AK7 FR 2 743 231 A1 07/1997 FR H04B 7/12 No AL7 GB 2 161 344 A 01/1986 GB H04B 7/12 N/A AM7 GB 2 215 945 A 09/1989 GB H04L 27/00 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Copy of Declaration of Richard C. Looke filed in patent application Ser. No. 09/176,022, which is directed to AN <u>7</u> related subject matter, 2 pages. Copy of Declaration of Charley D. Moses, Jr. filed in patent application Ser. No. 09/176,022, which is directed to AO <u>7</u> related subject matter, 2 pages. Copy of Declaration of Jeffrey L. Parker and David F. Sorrells, with attachment Exhibit 1, filed in patent ΑP <u>7</u> application Ser. No. 09/176,022, which is directed to related subject matter, 130 pages. Dewey, R.J. and Collier, C.J., "Multi-Mode Radio Receiver," Electronics Division Colloquium on Digitally AQ 7 Implemented Radios, IEE, pp. 3/1-3/5 (October 18, 1985). DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-276351, 1 page (November 13, 1990 -AR <u>7</u> Date of publication of application). **EXAMINER** DATE CONSIDERED **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP

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	AD8	4,3	56,558	10/19	982	Owe	n et al.		364	724				
	AE8	4,3	60,867	11/19	982	Gon	daata		363	158				
	AF8	4,3	63,132	12/19	982	Colli	<u> </u>		455	52	<u> </u>			
	AG8	4,3	65,217	12/19	982	Berg	er et al.		333	165	<u> </u>			
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	AK8 JP 2-131629			05/1990		JP		H04B	7/12	No				
	AL8 JP 2-276351 11/1990				11/1990	1990 JP				H04L	No			
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	AO	8	DIALOG File publication of	347 (J. applic	APIO) Englis ation).	sh Lan	guage Patent Abstract f	or JP 2-	39632, 1 pa	age (Februar)	/ 8, 1990 - Date of			
	AP	AP B DIALOG File 348 (European Patents) English Language Patent Abstract for EP 0 785 635 A1, 3 pages (December 26, 1996 - Date of publication of application).												
	AQ	8	DIALOG File : 18, 1981 - Da	DIALOG File 348 (European Patents) English Language Patent Abstract for EP 35166 A1, 2 pages (February 18, 1981 - Date of publication of application).										
K	AR	8	"DSO takes sa	amplin arch 19	g rate to 1 G 987).	hz," <i>E</i>	ilectronic Engineering, N	lorgan C	Grampian P	ublishers, Vo	I. 59, No. 723, pp.			
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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE CLASS SUB-**FILING DATE** NAME NUMBER CLASS 16 AA9 4,392,255 07/1983 **Del Gludice** 455 328 AB9 4,430,629 02/1984 Betzl et al. 333 165 AC9 4,446,438 05/1984 Chang et al. 328 127 AD9 4,456,990 06/1984 Fisher et al. 119 370 AE9 4,472,785 09/1984 Kasuga 364 718 AF9 4,479,226 10/1984 Prabhu et al. 375 1 AG9 11/1984 4,481,490 Huntley 332 41 AH9 4,481,642 11/1984 Hanson 375 9 AI9 4,485,488 11/1984 Houdart 455 327 FOREIGN PATENT DOCUMENTS EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-**TRANSLATION** CLASS WO 94/05087 A1 AJ9 03/1994 PCT 1/00 **H03M** N/A AK9 WO 96/02977 A1 02/1996 PCT H04B 1/26 N/A AL9 WO 96/08078 A1 03/1996 **PCT** H03D 3/00 N/A AM9 WO 96/39750 A1 12/1996 PCT H04B 1/26 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Erdi, G. and Henneuse, P.R., "A Precision FET-Less Sample-and-Hold with High Charge-to-Droop Current AN 9 Ratio," IEEE Journal of Solid-State Circuits, IEEE, Vol. SC-13, No. 6, pp. 864-873 (December 1978). Faulkner, N.D. and Vilar, E., "Subharmonic Sampling for the Measurement of Short Term Stability of Microwave AO 9 Oscillators," IEEE Transactions on Instrumentation and Measurement, IEEE, Vol. IM-32, No. 1, pp. 208-213 (March 1983). Faulkner, N.D. et al., "Sub-Harmonic Sampling for the Accurate Measurement of Frequency Stability of AP 9 Microwave Oscillators," CPEM 82 Digest: Conference on Precision Electromagnetic Measurements, IEEE, pp. M-10 and M-11 (1982). Faulkner, N.D. and Vilar, E., "Time Domain Analysis of Frequency Stability Using Non-Zero Dead-Time Counter AQ 9 Techniques," CPEM 84 Digest Conference on Precision Electromagnetic Measurements, IEEE, pp. 81-82 (1984).Fillp, M. and Vilar, E., "Optimum Utilization of the Channel Capacity of a Satellite Link in the Presence of Amplitude Scintillations and Rain Attenuation," *IEEE Transactions on Communications*, IEEE Communications AR 9 Society, Vol. 38, No. 11, pp. 1958-1965 (November 1990). **EXAMINER DATE CONSIDERED** 11 1. **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME **CLASS** FILING DATE SUB-NUMBER **CLASS AA10** 4,504,803 03/1985 332 31 R Lee et al. **AB10** 4,517,519 05/1985 Mukaiyama 329 126 AC10 4,517,520 05/1985 329 145 Ogawa AD10 4.518.935 05/1985 van Roemund 333 173 AE10 4,521,892 06/1985 Vance et al. 375 88 AF10 4,563,773 07/1986 Dixon, Jr. et al. 455 327 **AG10** 4,577,157 03/1986 Reed 329 50 **AH10** 4,583,239 04/1986 Vance 375 94 AI10 4,591,736 05/1986 Hirao et al. 307 267 FOREIGN PATENT DOCUMENTS EXAMINER INITIAL **DOCUMENT NUMBER** DATE CLASS SUB-COUNTRY TRANSLATION CLASS AJ10 WO 97/38490 A1 10/1997 **PCT** 7/00 H₀3K AK10 WO 98/00953 A1 01/1998 PCT HO4L 27/26 N/A AL10 WO 98/24201 A1 06/1998 PCT **H04H** 1/00 N/A **AM10** EP 0 099 265 A1 01/1984 EP H03D 3/04 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Fukahori, K., "A CMOS Narrow-Band Signaling Filter with Q Reduction," IEEE Journal of Solid-State Circuits, AN <u>10</u> IEEE, Vol. SC-19, No. 6, pp. 926-932 (December 1984). Fukuchi, H. and Otsu, Y., "Available time statistics of rain attenuation on earth-space path," IEE Proceedings-H: AO <u>10</u> Microwaves, Antennas and Propagation, IEE, Vol. 135, Pt. H, No. 6, pp. 387-390 (December 1988). Gibbins, C.J. and Chadha, R., "Millimetre-wave propagation through hydrocarbon flame," *IEE Proceedings*, IEE, Vol. 134, Pt. H, No.2, pp. 169-173 (April 1987). AP <u>10</u> Gilchrist, B. et al., "Sampling hikes performance of frequency synthesizers," *Microwaves & RF*, Hayden Publishing, Vol. 23, No. 1, pp. 93-94 and 110 (January 1984). AQ 10 Gossard, E.E., "Clear weather meteorological effects on propagation at frequencies above 1 Ghz," Radio AR <u>10</u> Science, American Geophysical Union, Vol. 16, No. 5, pp. 589-608 (September - October 1981). **EXAMINER** DATE CONSIDERED EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME CLASS SUB-FILING DATE **NUMBER CLASS AA11** 4.602,220 07/1986 Kurihara 331 19 **AB11** 4,603,300 07/1986 Welles, II et al. 329 50 **AC11** 4,612,464 09/1986 Ishikawa et al. 307 496 AD11 4,612,518 09/1986 Ġans et al. 332 21 AE11 4,616,191 10/1986 Galani et al. 331 4 AF11 4,621,217 11/1986 Saxe et al. 315 Schwarz et al. AG11 4,628,517 12/1986 375 40 AH11 4,634,998 01/1987 Crawford 331 1 A **AI11** 4,648,021 03/1987 Alberkrack 363 157 **FOREIGN PATENT DOCUMENTS EXAMINER** INITIA **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-TRANSLATION **CLASS** AJ11 EP 0 560 228 A1 09/1993 FP H₀3D 7/12 N/A AK11 FR 2 245 130 04/1975 FR **H03K** 5/13 Yes (See AP50) AL11 DE 35 41 031 A1 05/1986 DE H03D 3/00 Yes (See AR50) **AM11** EP 0 732 803 A1 09/1996 EΡ H03D 3/00 Yes (See AN51) OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Gregorian, R. et al., "Switched-Capacitor Circuit Design," Proceedings of the IEEE, IEEE, Vol. 71, No. 8, pp. AN 11 941-966 (August 1983). Groshong et al., "Undersampling Techniques Simplify Digital Radio," Electronic Design, Penton Publishing, pp. AO 11 67-68, 70, 73-75 and 78 (May 23, 1991). Grove, W.M., "Sampling for Oscilloscopes and Other RF Systems: Dc through X-Band," IEEE Transactions on AP 11 Microwave Theory and Techniques, IEEE, pp. 629-635 (December 1966). Haddon, J. et al., "Measurement of Microwave Scintillations on a Satellite Down-Link at X-Band," Antennas and Propagation, IEE, pp. 113-117 (1981). AQ 11 Haddon, J. and Vilar, E., "Scattering Induced Microwave Scintillations from Clear Air and Rain on Earth Space AR <u>11</u> Paths and the Influence of Antenna Aperture," IEEE Transactions on Antennas and Propagation, IEEE, Vol. AP-34, No. 5, pp. 646-657 (May 1986). **EXAMINER** DATE CONSIDERED 11 1 **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE **GROUP** August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE **NUMBER CLASS** 1 **AA12** 4,651,034 03/1987 Sato 307 556 **AB12** 4,675,882 06/1987 Lillie et al. 80 375 AC12 4,688,253 08/1987 7 Gumm 381 AD12 4,716,376 12/1987 Daudelin 329 107 AE12 4,716,388 12/1987 Jacobs 333 173 AF12 4,718,113 01/1988 Rother et al. 455 209 **AG12** 4,726,041 02/1988 Prohaska et al. 375 91 **AH12** 4,733,403 03/1988 Simone 375 103 A112 4,734,591 03/1988 307 Ichitsubo 219.1 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-TRANSLATION **CLASS** AJ12 DE 197 35 798 C1 07/1998 DE HO4L 27/00 Yes (See AP51) AK12 WO 98/40968 A2&A3 09/1998 PCT 7/08 H03L N/A AL12 EP 0 529 836 A1 03/1993 EP H₀3L 7/089 N/A **AM12** EP 0 795 955 A2&A3 09/1997 EΡ H03D 13/00 N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Hafdallah, H. et al., "2-4 Ghz MESFET Sampler," Electronics Letters, IEE, Vol. 24, No. 3, pp. 151-153 (February AN 12 4, 1988). Herben, M.H.A.J., "Amplitude and Phase Scintillation Measurements on 8-2 km Line-Of-Sight Path at 30 Ghz," AO <u>12</u> Electronics Letters, IEE, Vol. 18, No. 7, pp. 287-289 (April 1, 1982). Hewitt, A. et al., "An 18 Ghz Wideband LOS Multipath Experiment," International Conference on Measurements AP 12 for Telecommunication Transmission Systems - MTTS 85, IEE, pp. 112-116 (November 27-28, 1985) Hewitt, A. et al., "An Autoregressive Approach to the Identification of Multipath Ray Parameters from Field Measurements," *IEEE Transactions on Communications*, IEEE Communications Society, Vol. 37, No. 11, pp. AQ 12 1136-1143 (November 1989). Hewitt, A. and Vilar, E., "Selective fading on LOS Microwave Links: Classical and Spread-Spectrum AR <u>12</u> Measurement Techniques," IEEE Transactions on Communications, IEEE Communications Society, Vol. 36, No. 7, pp. 789-796 (July 1988). **EXAMINER** DATE CONSIDERED 11 // EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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APPLICATION NO. ATTY. DOCKET NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT CLASS SUB-FILING DATE DATE INITIAL NAME NUMBER CLASS 4,737,969 67 **AA13** 04/1988 Steel et al. 375 **AB13** 05/1988 330 10 4,743,858 Everard AC13 358 23 4,745,463 05/1988 Lu 4,751,468 AD13 06/1988 328 133 Agoston AE13 4,757,538 07/1988 Zink 381 7 AF13 4,768,187 08/1988 Marshall 370 69.1 **AG13** 4,769,612 09/1988 Tamakoshi et al. 328 167 **AH13** 11/1988 375 1 4,785,463 Janc et al. **AI13** 12/1988 364 525 4,791,584 Greivenkamp, Jr. **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER **CLASS** SUB-TRANSLATION DATE COUNTRY CLASS 01/1998 H03D 7/00 N/A AJ13 EP 0 817 369 A2&A3 EP 7/18 PCT H03D N/A **AK13** WO 91/18445 A1 11/1991 AL13 WO 99/23755 A1 05/1999 **PCT** H03D 7/16 N/A **AM13** JP 56-114451 09/1981 JP 7/02 No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Hospitalier, E., "Instruments for Recording and Observing Rapidly Varying Phenomena," Science Abstracts, IEE, AN <u>13</u> Vol. VII, pp. 22-23 (1904). Howard, I.M. and Swansson, N.S., "Demodulating High Frequency Resonance Signals for Bearing Fault AO <u>13</u> Detection," The Institution of Engineers Australia Vibration and Noise Conference, Institution of Engineers, Australia, pp. 115-121 (September 18-20, 1990). Hu, X., A Switched-Current Sample-and-Hold Amplifier for FM Demodulation, Thesis for Master of Applied AP <u>13</u> Science, Dept. of Electrical and Computer Engineering, University of Toronto, UMI Dissertation Services, pp. 1-64 (1995). Hung, H-L. A. et al., "Characterization of Microwave Integrated Circuits Using An Optical Phase-Locking and AQ <u>13</u> Sampling System," IEEE MTT-S Digest, IEEE, pp. 507-510 (1991). Hurst, P.J., "Shifting the Frequency Response of Switched-Capacitor Filters by Nonuniform Sampling," IEEE AR 13 Transactions on Circuits and Systems, IEEE Circuits and Systems Society, Vol. 38, No. 1, pp. 12-19 (January 1991). **EXAMINER DATE CONSIDERED EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 U.S. PATENT DOCUMENTS **EXAMINER** DOCUMENT **FILING DATE** INITIAL DATE NAME CLASS SUB-NUMBER **CLASS AA14** 4,801,823 307 353 01/1989 Yokoyama 4,806,790 AB14 02/1989 Sone 307 353 AC14 4,810,904 03/1989 Crawford 307 353 AD14 4,810,976 03/1989 Cowley et al. 331 117 R AE14 4,811,362 03/1989 Yester, Jr. et al. 375 75 Christopher 375 AF14 04/1989 122 4,819,252 341 118 AG14 4,833,445 05/1989 Buchele **AH14** 4,862,121 08/1989 Hochschild et al. 333 173 Al14 4,868,654 09/1989 Juri et al. 358 133 **FOREIGN PATENT DOCUMENTS EXAMINER** INITIA DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ14 JP 8-32556 02/1996 JP 1/04 H04L No **AK14** 05/1996 JP 7/00 JP 8-139524 H₀3D No **AL14** JP 59-144249 08/1984 JP H04L 27/00 No **AM14** JP 63-54002 03/1988 JР H03B 19/114 No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Itakura, T., "Effects of the sampling pulse width on the frequency characteristics of a sample-and-hold circuit," AN 14 IEE Proceedings Circuits, Devices and Systems, IEE, Vol. 141, No. 4, pp. 328-336 (August 1994). Janssen, J.M.L., "An Experimental 'Stroboscopic' Oscilloscope for Frequencies up to about 50 Mc/s: I. Fundamentals," *Philips Technical Review, Philips Research Laboratories, Vol. 12, No. 2, pp. 52-59* (August AO <u>14</u> Janssen, J.M.L. and Michels, A.J., "An Experimental 'Stroboscopic' Oscilloscope for Frequencies up to about 50 AP <u>14</u> Mc/s: II. Electrical Build-Up, " Philips Technical Review, Philips Research Laboratories, Vol. 12, No. 3, pp. 73-82 (September 1950). Jondral, V.F. et al., "Doppler Profiles for Communication Satellites," Frequenz, Herausberger, pp. 111-116 (May-AQ 14 June 1996). Kaleh, G.K., "A Frequency Diversity Spread Spectrum System for Communication in the Presence of In-band Interference," 1995 IEEE Globecom, IEEE Communications Society, pp. 66-70 (1995). AR 14 **EXAMINER** DATE CONSIDERED 11 **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE CLASS NAME FILING DATE SUR-NUMBER **CLASS AA15** 4.870,659 09/1989 Oishi et al. 375 82 **AB15** 4,871,987 10/1989 Kawase 332 100 **AC15** 4,885,587 12/1989 Wiegand et al. 42 14 AD15 4.885,756 12/1989 Fontanes et al. 375 82 **AE15** 4,888,557 12/1989 Puckette, IV et al. 329 341 AF15 4,890,302 12/1989 Muilwijk 80 375 AG15 4,893,316 01/1990 Janc et al. 375 44 **AH15** 4,893,341 01/1990 Gehring 7 381 Al15 4,894,766 01/1990 363 De Agro 159 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** COUNTRY DATE **CLASS** SUB-TRANSLATION CLASS AJ15 JP 6-237276 08/1994 JP H04L 27/20 No AK15 JP 8-23359 01/1996 JP HÓ4L 27/20 No AL15 JP 47-2314 02/1972 JP Yes (Doc. AP53) **AM15** JP 58-7903 01/1983 JP 1/02 H₀3C Partial (Doc. AQ53) OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Karasawa, Y. et al., "A New Prediction Method for Tropospheric Scintillation on Earth-Space Paths," IEEE AN Transactions on Antennas and Propagation, IEEE Antennas and Propagation Society, Vol. 36, No. 11, pp. 1608-<u>15</u> 1614 (November 1988). Kirsten, J. and Fleming, J., "Undersampling reduces data-acquisition costs for select applications," EDN, ΑO <u>15</u> Cahners Publishing, Vol. 35, No. 13, pp. 217-222, 224, 226-228 (June 21, 1990). Lam, W.K. et al., "Measurement of the Phase Noise Characteristics of an Unlocked Communications Channel AP Identifier," Proceedings Of the 1993 IEEE International Frequency Control Symposium, IEEE, pp. 283-288 (June 15 2-4, 1993). Lam, W.K. et al., "Wideband sounding of 11.6 Ghz transhorizon channel," Electronics Letters, IEE, Vol. 30, No. AQ 15 9, pp. 738-739 (April 28, 1994). Larkin, K.G., "Efficient demodulator for bandpass sampled AM signals," Electronics Letters, IEE, Vol. 32, No. 2, AR <u>15</u> pp. 101-102 (January 18, 1996). **EXAMINER DATE CONSIDERED** 11 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 U.S. PATENT DOCUMENTS **EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-**FILING DATE** NUMBER CLASS **AA16** 4.896.152 01/1990 340 853 Tiemann **AB16** 329 4,902,979 02/1990 Puckette, IV 343 AC16 4.908,579 03/1990 Tawfik et al. 328 167 AD16 4,910,752 03/1990 Yester, Jr. et al. 375 75 **AE16** 25 4,914,405 04/1990 Wells 331 AF16 4,920,510 04/1990 Senderowicz et al. 364 825 **AG16** 4,922,452 05/1990 365 Larsen et al. 45 AH16 06/1990 363 4,931,921 Anderson 163 **AI16** 4,944,025 07/1990 Gehring et al. 455 207 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-TRANSLATION **CLASS** AJ16 1/00 JP 58-133004 08/1983 JP H03D No **AK16** JP 60-58705 04/1985 JP H₀3D 7/00 No AL16 JP 4-123614 04/1992 JP H₀3K 19/0175 No **AM16** JP 4-127601 04/1992 H03D 7/00 No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Lau, W.H. et al., "Analysis of the Time Variant Structure of Microwave Line-of-sight Multipath Phenomena," AN <u>16</u> IEEE Global Telecommunications Conference & Exhibition, IEEE, pp. 1707-1711 (November 28 - December 1, Lau, W.H. et al., "Improved Prony Algorithm to Identify Multipath Components," Electronics Letters, IEE, Vol. 23, AO <u>16</u> No. 20, pp. 1059-1060 (September 24, 1987). Lesage, P. and Audoin, C., "Effect of Dead-Time on the Estimation of the Two-Sample Variance," IEEE ΑP <u>16</u> Transactions on Instrumentation and Measurement, IEEE Instrumentation and Measurement Society, Vol. IM-28, No. 1, pp. 6-10 (March 1979). Liechti, C.A., "Performance of Dual-gate GaAs MESFET's as Gain-Controlled Low-Noise Amplifiers and High-AQ <u>16</u> Speed Modulators," IEEE Transactions on Microwave Theory and Techniques, IEEE Microwave Theory and Techniques Society, Vol. MTT-23, No. 6, pp. 461-469 (June 1975). Linnenbrink, T.E. et al., "A One Gigasample Per Second Transient Recorder," IEEE Transactions on Nuclear AR 16 Science, IEEE Nuclear and Plasma Sciences Society, Vol. NS-26, No. 4, pp. 4443-4449 (August 1979). **EXAMINER DATE CONSIDERED** 11 / **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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APPLICATION NO. ATTY. DOCKET NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE NUMBER CLASS **AA17** 4,955,079 09/1990 325 Connerney et al. 455 **AB17** 4,965,467 10/1990 Bilterijst 307 352 AC17 4,967,160 10/1990 Quievy et al. 328 16 AD17 4,970,703 11/1990 Hariharan et al. 138 367 **AE17** 4,982,353 01/1991 Jacob et al. 364 724.10 **AF17** 01/1991 Uchida 4,984,077 358 140 **AG17** 02/1991 4,995,055 Weinberger et al. 375 5 **AH17** 5,003,621 03/1991 Gailus 455 209 **AI17** 04/1991 5,005,169 Bronder et al. 370 76 FOREIGN PATENT DOCUMENTS EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-**TRANSLATION CLASS** AJ17 07/1993 JP 5-175730 JΡ 1/00 H₀3D No **AK17** JP 5-175734 07/1993 JP H₀3D 3/00 No JP 7-154344 **AL17** 06/1995 JP H04B 14/06 No **AM17** JP 7-307620 11/1995 JP H₀3D 1/18 Nο OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Liou, M.L., "A Tutorial on Computer-Aided Analysis of Switched-Capacitor Circuits," *Proceedings of the IEEE*, IEEE, Vol. 71, No. 8, pp. 987-1005 (August 1983). AN <u>17</u> Lo, P. et al., "Coherent Automatic Gain Control," IEE Colloquium on Phase Locked Techniques, IEE, pp. 2/1-2/6 AO <u>17</u> (March 26, 1980). Lo, P. et al., "Computation of Rain Induced Scintillations on Satellite Down-Links at Microwave Frequencies," AP <u>17</u> Third International Conference on Antennas and Propagation (ICAP 83), pp. 127-131 (April 12-15, 1983). Lo, P.S.L.O. et al., "Observations of Amplitude Scintillations on a Low-Elevation Earth-Space Path," Electronics AQ <u>17</u> Letters, IEE, Vol. 20, No. 7, pp. 307-308 (March 29, 1984). Madani, K. and Aithison, C.S., "A 20 Ghz Microwave Sampler," IEEE Transactions on Microwave Theory and AR 17 Techniques, IEEE Microwave Theory and Techniques Society, Vol. 40, No. 10, pp. 1960-1963 (October 1992). **EXAMINER** ĺ/ **DATE CONSIDERED** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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APPLICATION NO. ATTY. DOCKET NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT CLASS SUB-FILING DATE INITIAL DATE NAME CLASS NUMBER IZ **AA18** 167 5,006,810 04/1991 328 Popescu **AB18** 5,010,585 04/1991 Garcia 455 118 **AC18** 5,014,304 05/1991 Nicollini et al. 379 399 AD18 05/1991 Sutton 329 361 5.015.963 **AE18** 5,017,924 05/1991 Guiberteau et al. 342 195 AF18 Hemmie 455 325 5,020,149 05/1991 AG18 5,020,154 05/1991 Zierhut 455 608 **AH18** 5,052,050 Collier et al. 455 296 09/1991 AI18 5,065,409 11/1991 Hughes et al. 375 91 FOREIGN PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER SUB-**TRANSLATION** DATE COUNTRY **CLASS** CLASS 7/10 AJ18 JP 55-66057 **G06K** No 05/1980 JP JP 63-65587 **G06K** 7/10 **AK18** JP No 03/1988 AL18 JP 63-153691 06/1988 JP G06K 17/00 No **AM18** 07/1988 7/00 N/A EP 0 276 130 A2&A3 EP H03D OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Marsland, R.A. et al., "130 Ghz GaAs monolithic integrated circuit sampling head," Appl. Phys. Lett., American AN <u>18</u> Institute of Physics, Vol. 55, No. 6, pp. 592-594 (August 7, 1989). Martin, K. and Sedra, A.S., "Switched-Capacitor Building Blocks for Adaptive Systems," *IEEE Transactions on Circuits and Systems*, IEEE Circuits and Systems Society, Vol. CAS-28, No. 6, pp. 576-584 (June 1981). AO <u>18</u> Marzano, F.S. and d'Auria, G., "Model-based Prediction of Amplitude Scintillation variance due to Clear-Air Tropospheric Turbulence on Earth-Satellite Microwave Links," *IEEE Transactions on Antennas and Propagation*, IEEE Antennas and Propagation Society, Vol. 46, No. 10, pp. 1506-1518 (October 1998). AP <u>18</u> Matricciani, E., "Prediction of fade durations due to rain in satellite communication systems," Radio Science, AQ 18 American Geophysical Union, Vol. 32, No. 3, pp. 935-941 (May-June 1997). McQueen, J.G., "The Monitoring of High-Speed Waveforms," *Electronic Engineering*, Morgan Brothers Limited, Vol. XXIV, No. 296, pp. 436-441 (October 1952). AR <u>18</u> **EXAMINER** DATE CONSIDERED 11 // EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 09/632,856 1744.0630003 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT INITIAL DATE NAME CLASS SUB-**FILING DATE** NUMBER CLASS **AA19** 5,083,050 01/1992 Vasile 307 529 **AB19** 5,091,921 02/1992 Minami 375 88 AC19 5,095,533 03/1992 Loper et al. 455 245 AD19 5.095,536 03/1992 324 Loper 455 **AE19** 5,111,152 05/1992 Makino 329 300 **AF19** 5,113,094 05/1992 Grace et al. 307 529 **AG19** 5,113,129 05/1992 Hughes 323 316 **AH19** 5,122,765 06/1992 **Pataut** 332 105 AI19 5,124,592 06/1992 Hagino 307 520 FOREIGN PATENT DOCUMENTS EXAMINER INITIAL SUB-**DOCUMENT NUMBER** DATE COUNTRY CLASS TRANSLATION CLASS AJ19 WO 95/01006 A1 01/1995 PCT **H03M** 1/66 N/A AK19 PCT WO 97/08839 A2&A3 03/1997 **H04B** 1/04 N/A AL19 Yes Nο **AM19** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Merkelo, J. and Hall, R.D., "Broad-Band Thin-Film Signal Sampler," IEEE Journal of Solid-State Circuits, IEEE, ΑN <u>19</u> Vol. SC-7, No. 1, pp. 50-54 (February 1972). Merlo, U. et al., "Amplitude Scintillation Cycles in a Sirio Satellite-Earth Link," Electronics Letters, IEE, Vol. 21, AO <u> 19</u> No. 23, pp. 1094-1096 (November 7, 1985). Morris, D., "Radio-holographic reflector measurement of the 30-m millimeter radio telescope at 22 Ghz with a AP <u> 19</u> cosmic signal source," Astronomy and Astrophysics, Springer-Verlag, Vol. 203, No. 2, pp. 399-406 (September (II) 1988). Moulsley, T.J. et al., "The efficient acquisition and processing of propagation statistics," Journal of the Institution AQ <u> 19</u> of Electronic and Radio Engineers, IERE, Vol. 55, No. 3, pp. 97-103 (March 1985). Ndzi, D. et al., "Wide-Band Statistical Characterization of an Over-the-Sea Experimental Transhorizon Link," IEE Colloquium on Radio Communications at Microwave and Millimetre Wave Frequencies, IEE, pp. 1/1-1/6 AR <u>19</u> (December 16, 1996). **EXAMINER DATE CONSIDERED EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 U.S. PATENT DOCUMENTS **EXAMINER** INITIAL **DOCUMENT** DATE NAME CLASS **FILING DATE** SUB-NUMBER CLASS **AA20** 5,136,267 08/1992 Cabot 333 174 **AB20** 5,140,705 08/1992 Kosuga 455 318 AC20 5,150,124 09/1992 Moore et al. 342 68 AD20 5,151,661 Caldwell et al. 09/1992 328 14 AE20 10/1992 5,159,710 Cusdin 455 304 AF20 5,170,414 12/1992 Silvian 59 375 AG20 5,172,070 12/1992 Hiraiwa et al. 329 304 **AH20** 5,191,459 03/1993 Thompson et al. 359 133 **AI20** 5,204,642 04/1993 Ashgar et al. 331 135 **FOREIGN PATENT DOCUMENTS** EXAMINÈR INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ20 Yes No AK20 Yes No AL₂₀ Yes No **AM20** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Ndzi, D. et al., "Wideband Statistics of Signal Levels and Doppler Spread on an Over-The-Sea Transhorizon AN <u> 20</u> Link," IEE Colloquium on Propagation Characteristics and Related System Techniques for Beyond Line-of-Sight Radio, IEE, pp. 9/1-9/6 (November 24, 1997). "New zero IF chipset from Philips," Electronic Engineering, United News & Media, Vol. 67, No. 825, p. 10 AO <u>20</u> (September 1995). Ohara, H. et al., "First monolithic PCM filter cuts cost of telecomm systems," Electronic Design, Hayden AP 20 Publishing Company, Vol. 27, No. 8, pp. 130-135 (April 12, 1979). AQ <u> 20</u> Oppenheim, A.V. et al., Signals and Systems, Prentice-Hall, pp. 527-531 and 561-562 (1983). Ortgies, G., "Experimental Parameters Affecting Amplitude Scintillation Measurements on Satellite Links," AR <u>20</u> Electronics Letters, IEE, Vol. 21, No. 17, pp. 771-772 (August 15, 1985). **EXAMINER DATE CONSIDERED** 1/ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449. APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-**FILING DATE** NUMBER CLASS 219 **AA21** 5,212,827 05/1993 Meszko et al. 455 **AB21** 5,214,787 05/1993 Karkota, Jr. 455 3.2 AC21 5,220,583 06/1993 375 82 Solomon AD21 5,220,680 06/1993 Lee 455 102 AE21 5,222,144 06/1993 Whikehart 15 381 AF21 5,230,097 07/1993 Currie et al. 455 226.1 **AG21** 08/1993 5,239,686 Downey 455 78 AH21 5,241,561 08/1993 Bamard 375 1 Al21 5,249,203 09/1993 Loper 375 97 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ21 Yes No AK21 Yes No AL21 Yes No AM21 Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Pärssinen et al., "A 2-GHz Subharmonic Sampler for Signal Downconversion." IEEE Transactions on Microwave AN 21 Theory and Techniques, IEEE, Vol. 45, No. 12, 7 pages (December 1997). Peeters, G. et al., "Evaluation of Statistical Models for Clear-Air Scintillation Prediction Using Olympus Satellite Measurements," International Journal of Satellite Communications, John Wiley and Sons, Vol. 15, No. 2, pp. 73-AO <u>21</u> 88 (March-April 1997). Perrey, A.G. and Schoenwetter, H.K., NBS Technical Note 1121: A Schottky Diode Bridge Sampling Gate, U.S. AP 21 Dept. of Commerce, pp. 1-14 (May 1980). Poulton, K. et al., "A 1-Ghz 6-bit ADC System," IEEE Journal of Solid-State Circuits, IEEE, Vol. SC-22, No. 6, AQ 21 pp. 962-969 (December 1987). Press Release, "Parkervision, Inc. Announces Fiscal 1993 Results," Lippert/Heilshorn and Associates, 2 Pages AR <u>21</u> (April 6, 1994). **EXAMINER** 11 DATE CONSIDERED // **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT** DATE NAME CLASS SUB-FILING DATE NUMBER CLASS AA22 5,251,218 10/1993 Stone et al. 370 120 **AB22** 5,251,232 10/1993 Nonami 375 5 AC22 5,260,970 11/1993 Henry et al. 375 10 AD22 5,263,194 11/1993 Ragan 455 316 AE22 5,263,196 11/1993 Jasper 455 324 AF22 5,267,023 11/1993 Kawasaki 23 358 AG22 5,278,826 01/1994 Murphy et al. 76 370 **AH22** 5,282,023 01/1994 Scarpa 358 36 AI22 5,287,516 02/1994 Schaub 88 375 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ22 No AK22 Yes No AL22 Yes No AM22 Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision, Inc. Announces the Appointment of Michael Baker to the New Position of National AN 22 Sales Manager," Lippert/Heilshorn and Associates, 1 Page (April 7, 1994). Press Release, "Parkervision's Cameraman Well-Received By Distance Learning Market," Lippert/Heilshorn and AO 22 Associates, 2 Pages (April 8, 1994). Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Lippert/Heilshorn and AP 22 Associates, 2 Pages (April 26, 1994). Press Release, "Parkervision, Inc. Announces The Retirement of William H. Fletcher, Chief Financial Officer," AQ <u>22</u> Lippert/Heilshorn and Associates, 1 Page (May 11, 1994). Press Release, "Parkervision, Inc. Announces New Cameraman System II™ At Infocomm Trade Show," AR 22 Lippert/Heilshorn and Associates, 3 Pages (June 9, 1994). **EXAMINER DATE CONSIDERED** 11 // **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS FILING DATE SUB-NUMBER CLASS **AA23** 5,293,398 03/1994 Hamao et al. 375 1 **AB23** 5,303,417 Laws 04/1994 455 314 AC23 5,307,517 04/1994 Rich 455 306 AD23 5,315,583 05/1994 Murphy et al. 370 18 AE23 5,321,852 06/1994 Seong 455 182.1 AF23 5,325,204 06/1994 348 Scarpa 607 AG23 5,337,014 08/1994 Najle et al. 324 613 **AH23** 5,339,054 08/1994 Taguchi 332 100 Al23 5,339,459 08/1994 Schiltz et al. 333 455 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS AJ23** No AK23 Yes Nο AL23 Yes No **AM23** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision, Inc. Announces Appointments to its National Sales Force," Lippert/Heilshorn and AN <u>23</u> Associates, 2 Pages (June 17, 1994). Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," AO <u>23</u> Lippert/Heilshom and Associates, 3 Pages (August 9, 1994). Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," AP <u>23</u> Lippert/Heilshorn and Associates, 3 Pages (October 28, 1994). Press Release, "Parkervision, Inc. Announces First Significant Dealer Sale of Its Cameraman® System II," AQ <u>23</u> Lippert/Heilshorn and Associates, 2 Pages (November 7, 1994). Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Results," Lippert/Heilshorn and AR <u>23</u> Associates, 2 Pages (March 1, 1995). **EXAMINER DATE CONSIDERED** 11 1 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

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Press Release, "PictureTel and ParkerVision Sign Reseller Agreement," Parkervision Marketin Manufacturing Headquarters, 2 Pages (October 30, 1996). AQ 28 Press Release, "CLI and ParkerVision Bring Enhanced Ease-of-Use to Videoconferencing," C Pages (January 20, 1997).											ion Marketin	g and
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conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-**FILING DATE** NUMBER **CLASS AA31** 5.604,732 02/1997 Kim et al. 370 342 **AB31** 5,608,531 03/1997 Honda et al. 386 1 AC31 03/1997 269 5,610,946 Tanaka et al. 375 AD31 RE 35,494 04/1997 Nicollini 327 554 AE31 5,617,451 04/1997 Mimura et al. 375 340 AF31 5.619.538 04/1997 Sempel et al. 375 328 5,621,455 04/1997 **AG31** Rogers et al. 348 6 **AH31** 5,630,227 05/1997 Bella et al. 455 324 AI31 5,640,415 06/1997 **Pandula** 375 202 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ31 Yes No AK31 Yes No AL31 Yes No **AM31** Yes No OTHER (including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision Announces Existing Agreement with IBM Terminates— Company Continues with Strategic Focus Announced in December," Parkervision Marketing and Manufacturing Headquarters, 2 Pages AN <u>31</u> (January 27, 1998). Press Release, "Laboratory Tests Verify Parkervision Wireless Technology," Parkervision Marketing and AO <u>31</u> Manufacturing Headquarters, 2 Pages (March 3, 1998). Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Financial Results," Parkervision AP <u>31</u> Marketing and Manufacturing Headquarters, 3 Pages (March 5, 1998). Press Release, "Parkervision Awarded Editors' Pick of Show for NAB 98," Parkervision Marketing and AQ <u>31</u> Manufacturing Headquarters, 2 Pages (April 15, 1998). Press Release, "Parkervision Announces First Quarter Financial Results," Parkervision Marketing and AR <u>31</u> Manufacturing Headquarters, 3 Pages (May 4, 1998). **EXAMINER DATE CONSIDERED** 1 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME **CLASS** FILING DATE SUB-NUMBER CLASS **AA32** 5,640,424 06/1997 Banavong et al. 375 316 AB32 Abe et al. 5.640.428 06/1997 375 334 AC32 5,640,698 06/1997 Shen et al. 455 323 AD32 5,648,985 07/1997 Bierede et al. 375 219 AE32 5,650,785 07/1997 Rodal 342 357 AF32 5,661,424 08/1997 Tang 327 105 AG32 5,663,878 09/1997 Walker 363 159 **AH32** 5,663,986 09/1997 Striffler 375 260 Al32 09/1997 5,668,836 Smith et al. 375 316 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIA **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-**TRANSLATION** CLASS AJ32 Yes No AK32 Yes No AL32 Yes No **AM32** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision 'DIRECT2DATA' Introduced in Response to Market Demand," Parkervision AN <u>32</u> Marketing and Manufacturing Headquarters, 3 Pages (July 9, 1998). Press Release, "Parkervision Expands Senior Management Team," Parkervision Marketing and Manufacturing AO <u>32</u> Headquarters, 2 Pages (July 29, 1998). Press Release, "Parkervision Announces Second Quarter and Six Month Financial Results," Parkervision ΑP <u>32</u> Marketing and Manufacturing Headquarters, 4 Pages (July 30, 1998). Press Release, "Parkervision Announces Third Quarter and Nine Month Financial Results," Parkervision AQ <u>32</u> Marketing and Manufacturing Headquarters, 3 Pages (October 30, 1998). Press Release, "Questar Infocomm, Inc. Invests \$5 Million in Parkervision Common Stock," Parkervision AR <u>32</u> Marketing and Manufacturing Headquarters, 3 Pages (December 2, 1998). **EXAMINER** DATE CONSIDERED // EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. ::OOMAMHODMA\SKGF_DC1;32488;1

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		AO	<u>34</u>	Reeves, R.J.C Brothers Limit	D., "Th led, Vo	e Recording ol. 31, No. 37	and 0	Collocation of Waveforms (I 204-212 (April 1959).	Part 2)," <i>Electro</i>	nic Engineerii	ng, Morgan		
		АР	<u>34</u>	Rein, H.M. an Transistors," <i>I</i>	d Zahi E <i>lectr</i> o	n, M., "Subna onics Letters	anose , IEE,	cond-Pulse Generator with Vol. 11, No. 1, pp. 21-23 (J	Variable Pulsev January 9, 1975)	vidth Using A	valanche		
AQ 34 Riad, S.M. and Nahman, N.S., 'IEEE MTT-S International Micro								ing of the Feed-through Wi Symposium Digest, IEEE, p	deband (DC to 1 pp. 267-269 (Jur	2.4 Ghz) Sar le 27-29, 197	npling-Head,* 8).		
	12	AR	<u>34</u>	Rizzoli, V. et a Microwave Th	al., "Co eory s	omputer-Aide and Techniqu	ed Noi: Jes, IE	se Analysis of MESFET an EE, Vol. 37, No. 9, pp. 140	d HEMT Mixers, 1-1410 (Septen	" <i>IEEE Trans</i> ber 1989).	actions on		
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	AF35	5,77	71,442	06/1	998	Wan	g et al.	45	5	93		
	AG35	5,77	77,692	07/1	998	Gho	sh	34	8	725		
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	Sabel, L.P., "A DSP Implementation of a Robust Flexible Receiver/Demultiplexer for Broadcast Data Satell Communications," <i>The Institution of Engineers Australia Communications Conference</i> , Institution of Engineers Australia, pp. 218-223 (October 16-18, 1990). AR 35 Salous, S., "IF digital generation of FMCW waveforms for wideband channel characterization," <i>IEE Proceetly</i> , IEE, Vol. 139, No. 3, pp. 281-288 (June 1992).											
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Page 37 of 56 ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE NUMBER **CLASS AA37** 5,892,380 04/1999 Quist 327 172 **AB37** 5,894,239 04/1999 Bonaccio et al. 327 176 **AC37** 5.896.562 04/1999 Heinonen 455 76 AD37 5,900,747 05/1999 **Brauns** 327 9 **AE37** 5,901,054 05/1999 Leu et al. 363 41 AF37 5,901,187 05/1999 linuma 375 347 **AG37** 5,901,344 05/1999 Opas 455 76 5,901,347 **AH37** 05/1999 Chambers et al. 455 234.1 **AI37** 05/1999 5,901,348 Bang et al. 455 254 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIÁL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-TRANSLATION **CLASS** AJ37 No **AK37** Yes No AL37 Yes No **AM37** Yes Νo OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Shen, X. and Tawfik, A.N., "Dynamic Behaviour of Radio Channels Due to Trans-Horizon Propagation AN 37 Mechanisms," Electronics Letters, IEE, Vol. 29, No. 17, pp. 1582-1583 (August 19, 1993). Shen, X. et al., "Modeling Enhanced Spherical Diffraction and Troposcattering on a Transhorizon Path with aid AO <u>37</u> of the parabolic Equation and Ray Tracing Methods," IEE Colloquium on Common modeling techniques for electromagnetic wave and acoustic wave propagation, IEE, pp. 4/1-4/7 (March 8, 1996). Shen, X. and Vilar, E., "Path loss statistics and mechanisms of transhorizon propagation over a sea path," ΑP <u>37</u> Electronics Letters, IEE, Vol. 32, No. 3, pp. 259-261 (February 1, 1996). Shen, D. et al., "A 900 MHZ Integrated Discrete-Time Filtering RF Front-End," IEEE International Solid State AQ <u>37</u> Circuits Conference, IEEE, Vol. 39, pp. 54-55 and 417 (February 1996). Spillard, C. et al., "X-Band Tropospheric Transhorizon Propagation Under Differing Meteorological Conditions," AR Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, IEE, pp. 451-455 <u>37</u> (April 4-7, 1989).

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME CLASS SUB-FILING DATE NUMBER CLASS **AA41** 5,515,014 05/1996 Troutman 332 178 **AB41** 5,563,550 10/1996 Toth 347 329 AC41 5,574,755 11/1996 Persico 375 295 AD41 5,604,592 02/1997 Kotidis et al. 356 357 AE41 5,638,396 06/1997 Klimek 372 92 AF41 5.675.392 10/1997 Nayebi et al. 348 584 **AG41** Ushiroku et al. 5,694,096 12/1997 333 195 **AH41** 5,757,870 05/1998 Miya et al. 375 367 A141 5,768,323 06/1998 Kroeger et al. 375 355 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-**TRANSLATION** CLASS AJ41 Yes No AK41 Yes No AL41 Yes No **AM41** Yes Nο OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Tomassetti, Q., "An Unusual Microwave Mixer," 16th European Microwave Conference, Microwave Exhibitions AN 41 and Publishers, pp. 754-759 (September 8-12, 1986). Tortoli, P. et al., "Bidirectional Doppler Signal Analysis Based on a Single RF Sampling Channel," IEEE AO Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, IEEE Ultrasonics, Ferroelectrics, and 41 Frequency Control Society, Vol. 41, No. 1, pp. 1-3 (January 1984). Tsividis, Y. and Antognetti, P. (Ed.), Design of MOS VLSI Circuits for Telecommunications, Prentice-Hall, p. 304 AP 41 (1985).Tsividis, Y., "Principles of Operation and Analysis of Switched-Capacitor Circuits," Proceedings of the IEEE, AQ <u>41</u> IEEE, Vol. 71, No. 8, pp. 926-940 (August 1983). Tsurumi, H. and Maeda, T., "Design Study on a Direct Conversion Receiver Front-End for 280 MHZ, 900 MHZ. AR and 2.6 Ghz Band Radio Communication Systems," 41th IEEE Vehicular Technology Conference, IEEE <u>41</u> Vehicular Technology Society, pp. 457-462 (May 19-22, 1991). **EXAMINER** DATE CONSIDERED // **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 09/632,856 1744.0630003 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT DATE CLASS **FILING DATE** SUB-INITIAL NAME NUMBER CLASS **AA42** 06/1998 193 5,770,985 Ushiroku et al. 333 **AB42** 5,778,022 07/1998 Walley 375 206 09/1998 370 342 AC42 5,812,546 Zhou et al. AD42 10/1998 Miya et al. 375 206 5,818,869 AE42 5,844,449 12/1998 Abeno et al. 332 105 AF42 02/1999 Cranford, Jr. et al. 323 315 5,872,446 AG42 5,909,447 06/1999 Cox et al. 370 508 375 **AH42** 08/1999 350 5,933,467 Sehier et al. A142 332 09/1999 128 5,952,895 McCune, Jr. et al. **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ42 No AK42 Yes No AL42 Yes No AM42 Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Valdmanis, J.A. et al., "Picosecond and Subpicosend Optoelectronics for Measurements of Future High Speed AN <u>42</u> Electronic Devices," IEDM Technical Digest, IEEE, pp. 597-600 (December 5-7, 1983). van de Kamp, M.M.J.L., "Asymmetric signal level distribution due to tropospheric scintillation," Electronics AO 42 Letters, IEE, Vol. 34, No. 11, pp. 1145-1146 (May 28, 1998). Vasseur, H. and Vanhoenacker, D., "Characterization of tropospheric turbulent layers from radiosonde data," ΑP <u>42</u> Electronics Letters, IEE, Vol. 34, No. 4, pp. 318-319 (February 19, 1998). Verdone, R., "Outage Probability Analysis for Short-Range Communication Systems at 60 Ghz in ATT Urban AQ Environments," IEEE Transactions on Vehicular Technology, IEEE Vehicular Technology Society, Vol. 46, No. 4, 42 pp. 1027-1039 (November 1997). Vierira-Ribelro, S.A., Single-IF DECT Receiver Architecture using a Quadrature Sub-Sampling Band-Pass AR <u>42</u> Sigma-Delta Modulator, Thesis for Degree of Master's of Engineering, Carleton University, UMI Dissertation Services, pp. 1-180 (April 1995). **EXAMINER DATE CONSIDERED** / **EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME **CLASS** SUB-**FILING DATE** NUMBER **CLASS AA43** 5,960,033 207 09/1999 Shibano et al. 375 AB43 Davidovici et al. 6,041,073 03/2000 375 148 AC43 6,054,889 Kobayashi 327 357 04/2000 AD43 6,084,922 07/2000 Zhou et al. 375 316 AE43 6,125,271 09/2000 Rowland et al. 455 313 03/06/1998 AF43 6,147,340 11/2000 Levy 250 214 R 09/29/1998 **AG43** 6,147,763 Steinlechner 12/27/1999 11/2000 356 484 **AH43** 6,150,890 11/2000 Damgaard et al. 331 14 09/30/1998 **AI43** 5,126,682 06/1992 Weinberg et al. 329 304 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ43 Yes No AK43 Yes No AL43 Yes No AM43 Yes No OTHER (including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. et al., "A Comprehensive/Selective MM-Wave Satellite Downlink Experiment on Fade Dynamics," Tenth AN International Conference on Antennas and Propagation, Electronics Division of the IEE, pp. 2.98-2.101 (April 14-<u>43</u> 17, 1997). Vilar, E. et al., "A System to Measure LOS Atmospheric Transmittance at 19 Ghz." AGARD Conference Proceedings No. 346: Characteristics of the Lower Atmosphere Influencing Radio Wave Propagation, AGARD, AO <u>43</u> pp. 8-1 - 8-16 (October 4-7, 1983). Vilar, E. and Smith, H., "A Theoretical and Experimental Study of Angular Scintillations in Earth Space Paths," AP <u>43</u> IEEE Transactions on Antenna's and Propagation, IEEE, Vol. AP-34, No. 1, pp. 2-10 (January 1986). Vilar, E. et al., "A Wide Band Transhorizon Experiment at 11.6 Ghz." Eighth International Conference on AQ <u>43</u> Antennas and Propagation, Electronics Division of the IEE, pp. 441-445 (March 30- April 2, 1993). Vilar, E. and Matthews, P.A., "Amplitude Dependence of Frequency in Oscillators," Electronics Letters, IEE, Vol. AR <u>43</u> 8, No. 20, pp. 509-511 (October 5, 1972). **EXAMINER** DATE CONSIDERED / **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-**FILING DATE** NUMBER **CLASS AA44** 5,841,811 11/1998 Song 235 375 4,051,475 **AB44** 09/1977 343 Campbell 180 **AC44** 5,953,642 09/1999 Feldtkeller et al. 455 195.1 AD44 4.653,117 03/1987 Heck 455 209 AE44 5,859,878 01/1999 Phillips et al. 375 316 AF44 5,894,496 04/1999 Jones 455 126 **AG44** 5,915,278 06/1999 Mallick 73 658 **AH44** 6,028,887 02/2000 Harrison et al. 375 206 Al44 6,081,691 06/2000 455 Renard et al. 12.1 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ44 Yes Na **AK44** Yes No AL44 Yes No AM44 Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. et al., "An experimental mm-wave receiver system for measuring phase noise due to atmospheric AN <u>44</u> turbulence," Proceedings of the 25th European Microwave Conference, Nexus House, pp. 114-119 (1995). Vilar, E. and Burgueño, A., "Analysis and Modeling of Time Intervals Between Rain Rate Exceedances in the Context of Fade Dynamics," *IEEE Transactions on Communications*, IEEE Communications Society, Vol. 39, AO <u>44</u> No. 9, pp. 1306-1312 (September 1991). Vilar, E. et al., "Angle of Arrival Fluctuations in High and Low Elevation Earth Space Paths," Fourth International AP Conference on Antennas and Propagation (ICAP 85), Electronics Division of the IEE, pp. 83-88 (April 16-19, <u>44</u> 1985). Vilar, E., "Antennas and Propagation: A Telecommunications Systems Subject," Electronics Division Colloquium AQ 44 on Teaching Antennas and Propagation to Undergraduates, IEÉ, pp. 7/1-7/6 (March 8, 1988). Vilar, E. et al., "CERS*. Millimetre-Wave Beacon Package and Related Payload Doppler Correction Strategies," AR 44 Electronics Division Colloquium on CERS- Communications Engineering Research Satellite, IEE, pp. 10/1-10/10 (April 10, 1984). **EXAMINER DATE CONSIDERED** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME **CLASS** SUB-FILING DATE NUMBER CLASS **AA45** 6,121,819 09/2000 359 Traylor 327 04/06/1998 AB45 11/2000 6.144.236 Vice et al. 327 02/01/1998 113 AC45 6,144,846 11/2000 Durec 455 323 12/31/1997 AD45 6,175,728 B1 01/2001 Mitama 455 323 03/03/1998 AE45 5,705,949 01/1998 Aleiyunas et al. 329 304 AF45 5,883,548 03/1999 Assard et al. 329 306 AG45 4,484,143 11/1984 French et al. 329 50 **AH45** 5,841,324 11/1998 Williams 17 331 Al45 08/1989 4,855,894 Asahi et al. 363 157 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ45 Yes Nο AK45 Yes No AL45 Yes No **AM45** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. and Moulsley, T.J., "Comment and Reply: Probability Density Function of Amplitude Scintillations," AN <u>45</u> Electronics Letters, IEE, Vol. 21, No. 14, pp. 620-622 (July 4, 1985). Vilar, E. et al., "Comparison of Rainfall Rate Duration Distributions for ILE-IFE and Barcelona," Electronics AO <u>45</u> Letters, IEE, Vol. 28, No. 20, pp. 1922-1924 (September 24, 1992). Vilar, E., "Depolarization and Field Transmittances in Indoor Communications," Electronics Letters, IEE, Vol. 27, AP <u>45</u> No. 9, pp. 732-733 (April 25, 1991). Vilar, E. and Larsen, J.R., "Elevation Dependence of Amplitude Scintillations on Low Elevation Earth Space AQ Paths," Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, IEE, pp. <u>45</u> 150-154 (April 4-7, 1989). Vilar, E. et al., "Experimental System and Measurements of Transhorizon Signal Levels at 11 Ghz," 18th AR European Microwave Conference, Microwave Exhibitions and Publishers Ltd., pp. 429-435 (September 12 - 15, <u>45</u> 1988). **EXAMINER** // DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP August 4, 2000 2634 **U.S. PATENT DOCUMENTS** EXAMINER CLASS FILING DATE **DOCUMENT** SUB-INITIAL DATE NAME NUMBER CLASS 17 363 **AA47** 5,959,850 09/1999 Lim 375 1 **AB47** 5,157,687 10/1992 Tymes 235 AC47 462.46 5,945,660 08/1999 Nakasuji et al. 455 102 **AD47** 6,091,939 07/2000 Banh AE47 6,091,941 07/2000 Moriyama et al. 455 126 235 472.01 01/21/1998 AF47 6.098,886 08/2000 Swift et al. **AG47** 04/2001 Meyerson et al. 345 173 06/07/1995 6,215,475 B1 455 313 Cook et al. **AH47** 6,049,706 04/2000 Al47 455 118 6,061,551 05/2000 Sorrells et al. **FOREIGN PATENT DOCUMENTS** EXAMINER **CLASS** SUB-INITIAL DOCUMENT NUMBER DATE COUNTRY TRANSLATION CLASS **AJ47** No AK47 Yes Nο Yes AL47 Nο **AM47** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. and Senin, S., "Propagation phase noise identified using 40 Ghz satellite downlink," Electronics Letters, AN 47 IEE, Vol. 33, No. 22, pp. 1901-1902 (October 23, 1997). Vilar, E. et al., "Scattering and Extinction: Dependence Upon Raindrop Size Distribution in Temperate (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Propagation, Electronics Division of the IEE, pp. 2.230-2.233 (April 14-17, 1997). AO <u>47</u> Vilar, E. and Haddon, J., "Scintillation Modeling and Measurement - A Tool for Remote-Sensing Slant Paths," AGARD Conference Proceedings No. 332: Propagation Aspects of Frequency Sharing, Interference And System AP 47 Diversity, AGARD, pp. 27-1 - 27-13 (October 18-22, 1982). Vilar, E., "Some Limitations on Digital Transmission Through Turbulent Atmosphere," International Conference on Satellite Communication Systems Technology, Electronics Division of the IEE, pp. 169-187 (April 7-10, AQ <u>47</u> 1975). Vilar, E. and Matthews, P.A., "Summary of Scintillation Observations in a 36 Ghz Link Across London," International Conference on Antennas and Propagation Part 2: Propagation, IEE, pp. 36-40 (November 28-30, AR 47 1978). **EXAMINER** DATE CONSIDERED / 11 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 09/632,856 1744.0630003 FORM PTO-1449 APPLICANT Sorrells et al. INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE August 4, 2000 2634 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT CLASS SUB-FILING DATE DATE NAME INITIAL NUMBER **CLASS** 455 313 **AA48** 05/2000 Bultman et al. 6,061,555 **AB48** 6,091,940 07/2000 Sorrells et al. 455 118 AC48 6,266,518 B1 07/2001 Sorrells et al. 455 118 08/18/1999 03/2002 Sorrells et al. 455 118 08/23/1999 AD48 6.353,735 B1 **AE48** 6,370,371 B1 04/2002 Sorrells et al. 455 323 03/03/1999 89 455 AF48 5,628,055 05/1997 Stein 455 302 AG48 5,678,220 10/1997 Fournier 329 304 **AH48** 07/1999 Wakai et al. 5,926,065 11/1971 Oberdorf et al. 325 40 A148 3,622,885 **FOREIGN PATENT DOCUMENTS** EXAMINER CLASS SUB-TRANSLATION INITIAL **DOCUMENT NUMBER** DATE COUNTRY CLASS Yes AJ48 No Yes **AK48** No Yes AL48 No Yes **AM48** No OTHER (including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. et al., "Wideband Characterization of Scattering Channels," Tenth International Conference on Antennas and Propagation, Electronics Division of the IEE, pp. 2.353-2.358 (April 14-17, 1997). AN 48 Vollmer, A., "Complete GPS Receiver Fits on Two Chips," *Electronic Design*, Penton Publishing, pp. 50, 52, 54 and 56 (July 6, 1998). AO <u>48</u> Voltage and Time Resolution in Digitizing Oscilloscopes: Application Note 348, Hewlett Packard, pp. 1-11 AP <u>48</u> (November 1986). Wan, K.W. et al., "A Novel Approach to the Simultaneous Measurement of Phase and Amplitude Noises in Oscillator," *Proceedings of the 19th European Microwave Conference*, Microwave Exhibitions and Publishers Ltd., pp. 809-813 (September 4-7, 1989). AQ <u>48</u> Wan, K.W. et al., "Extended Variances and Autoregressive/Moving Average Algorithm for the Measurement and AR Synthesis of Oscillator Phase Noise," Proceedings Of the 43d Annual Symposium on Frequency Control, IEEE, <u>48</u> pp. 331-335 (1989). **EXAMINER DATE CONSIDERED** // EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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		AN	<u>51</u>	Translation of	EP P	atent No. 0 7	32 80	03 A1, 9 pages.				
		AO	<u>51</u>	Fest, Jean-Pie 54, 3 pages (I	епе, " Decem	The A/D Con ber 1995).(verte (Tran:	r Revolutionizes the Radio slation of Doc. AQ50).	Receiver,*	' Electro	nique, JMJ (Publisher), No.
		АР	<u>51</u>	Translation of 6	Germa	n Patent No.	DE 1	97 35 798 C1, 8 pages.				
		AQ	<u>51</u>	Miki, S. and N (April 30, 1956	agaha 3).	ma, R., <i>Mod</i>	lulatic	on System II, Common Editi	on 7, Kyoi	ritsu Put	olishing Co.,	Ltd., pp. 146-154
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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT						ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 APPLICANT Sorrells et al.						
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	AO	<u>53</u>	English-langu Pages (Janua	age Al ary 23,	bstract of Jap 1996 - Date	oanes of pul	e Patent Publication No. 0 Dication of application).	8-023359, from <i>t</i>	ttp://www1.ip	odl.jpo.go.jp, 2		
	АР	<u>53</u>	Translation of	Japar	nese Patent F	Public	ation No. 47-2314, 7 page	s .				
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AK54 AL54 AL54 AM54 OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Pages (April 4, 1985 - Date of publication of application). AO 54 English-language Abstract of Japanese Patent Publication No. 04-123614, from http://www1.ipdl.jpo.go.jp. 2 Pages (April 23, 1992 - Date of publication of application). AP 54 English-language Abstract of Japanese Patent Publication No. 04-123614, from http://www1.ipdl.jpo.go.jp. 2 Pages (April 28, 1992 - Date of publication of application). AQ 54 English-language Abstract of Japanese Patent Publication No. 04-127601, from http://www1.ipdl.jpo.go.jp. 2 Pages (July 13, 1993 - Date of publication of application). AR 54 English-language Abstract of Japanese Patent Publication No. 05-175730, from http://www1.ipdl.jpo.go.jp. 2 Pages (July 13, 1993 - Date of publication of application). AR 54 English-language Abstract of Japanese Patent Publication No. 05-175734, from http://www1.ipdl.jpo.go.jp. 2 Pages (July 13, 1993 - Date of publication of application).		AJ54										Yes	
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	АР	<u>55</u>	Oppenheim, A 136-165 (1975	V. an	d Schafer, R.	W., 4	Digital Signal Processing,	Prentice-Hall, pp.	. vii-x, 6-35, 4	5-78, 87-121 and			
	AQ	<u>55</u>	English-langua Page (May 19,	ige At 1980	estract of Japa - Date of pub	anesolicati	e Patent Publication No. 5 on of application).	5-066057, from <i>h</i>	ttp://www1.ip	dl.jpo.go.jp, 1			
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E	AE49	6,42	1,534 B1	07/20	002	Cool	cet al. ``				08/18/1999
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	AG49		4,357	05/19			ida et al.				
10	AH49 AI49		0,145 0,680	09/19		Willia	ams ima <i>et al</i> .			 	
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EXAMINER INITIAL		DOC	UMENT NUM	BER	DATE		COUNTRY	CI	ASS	SUB- CLASS	TRANSLATION
6	AL19	EP 0	254 844 A2		02/1988		EP	Н)3D	7/00	N/A
\sim	AM19	EP 0	632 577 A1		01/1995		EP	н)3D	7/16	N/A
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E	AO	<u>56</u>	Translation o application).	f Japa	nese Patent	Public	ation No. 60-130203, 3 pa	iges (July	11, 198	5- Date of p	ublication of
	АР	<u>56</u>					S Transmitter for Dual-Ba 128-131 (1998).	nd Applic	ations,"	Symposium	on VLSI Circuits
	AQ	<u>56</u>	Ritter, G.M., Exhibitions a	'SDA, nd Pub	A New Solut Dishers, pp.	tion fo 729-7	r Transceivers," <i>16th Euro</i> 33 (September 8, 1986).	pean Mic	rowave (Conference,	Microwave
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	AC50	+	4,279 B1	11/20		Mohi		+		<u> </u>	06/29/1998
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	AK20	DE 1	96 27 640 A1		01/1997		DE	но	3D	7/12	No
	AL20	EP 0	087 336 A1	` !	08/1983		EP	НО	3D	7/12	No
"W	AM20	EP 0	087 336 B1		07/1986		EP	H0	3D	7/12	No
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C	AN	<u>57</u>	Akos, D.M. e Communicati	al., "[ons, lE	Direct Bandpa EEE, Vol. 47,	ass S No. 7	ampling of Multiple Distinct R 7, pp. 983-988 (July 1999).	F Sign	als," <i>IEE</i>	E Transactio	ns on
	AO	<u>57</u>	Patel, M. et a Jitter," VTC 2	/., "Ba 002, II	ndpass Samp EEE, pp. 190	oling 1 1-190	for Software Radio Receivers 55 (2002).	, and ti	ne Effect	of Oversam	oling on Aperture
	AP	<u>57</u>	English-langu publication of			panes	e Patent Publication No. 61-0	30821	, 1 Page	(February 1	3, 1986- Date of
6	AQ	<u>57</u>	English-langu of publication	age A of app	bstract of Jap plication).	panes	se Patent Publication No. 05-3	327356	, 1 Page	(December	10, 1993 - Date
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	AB51	5,937	7,013	08/19	999	Lam	et al.			ļ	01/03/1997
	AC51	6,014		01/20		_	ola et al.				07/16/1997
	AD51	6,073		06/20		Soko				<u> </u>	05/08/1998
	AE51		5,073	07/20		_	rmo et al.				03/02/1998
<u> </u>	AF51	6,400),963 B1	06/20	002	Glöc	kler <i>et al</i> .	<u> </u>		<u> </u>	05/21/1999
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	AK21	FR 2	669 787 A1		05/1992		FR	но	3D	7/14	Мо
	AL21	GB 2	324 919 A		11/1998		GB	НО	3D	7/18	N/A
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INFORMATION SCLOSURE STATEMENT ATTY. DOCKET NO. 1744.0630003 APPLICANTS Sorrells et al.

APPLICATION NO. 09/632,856

FILING DATE August 4, 2000

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	Al51	6,542	2,722 B1	04/20			ils et al.	<u>. </u>	<u> </u>	<u></u>
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	AL22	EP 0	877 476 A1		11/1998		EP			N/A
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K	AR	<u>57</u>	Tayloe, D., */ Business Ma	\ Low- gazine	noise, High- _l s & Media, li	perform	mance Zero IF Quadrature De b. 58, 60, 62 and 69 (March 20	003).		
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	AC52		64,097	10/1	996	Swa	nke				
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(C	AN	<u>58</u>	Dines, J.A.B., Journal of Sea	"Sma ected	rt Pixel Opto Topics in Qu	electr <i>iantun</i>	onic Receiver Based on a C n Electronics, IEEE, Vol. 2,	Charge S No. 1, pp	ensitive b. 117-1	Amplifier De 20 (April 199	esign," <i>IEEE</i> 96).
	AO	<u>58</u>	Simoni, A. et Control and Ir	al., "A estrum	Digital Came entation, IEE	era for E, pp	Machine Vision," <i>20th Inte.</i> . 879-883 (September 1994	rnational).	Confere	ance on Indu	ıstrial Electronics,
	AP	<u>58</u>					mpling and sigma-delta stra EEE, pp. 37-47 (February 1		r data c	onversion," i	Electronics &
	AQ	<u>58</u>	Rudell, J.C. e. Applications,"	al., ", IEEE	A 1.9-Ghz W Journal of S	ide-Ba olid-Si	and IF Double Conversion C late Circuits, IEEE, Vol. 32,	CMOS Re No. 12,	eceiver f	or Cordless I-2088 (Dec	Telephone ember 1997).
16	AR	<u>58</u>	English-langua	age Ál	ostract of Jap 1997 - Date	oanes	e Patent Publication No. 09-	-036664,	from ht	tp://www1.ip	odl.jpo.go.jp, 2

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

English-language Abstract of Japanese Patent Publication No. 09-036664, from http://www1.ipdl.jpo.go.jp, 2 Pages (February 7, 1997 - Date of publication of application).

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	AA53	6,327	,313 B1	12/20	001	Tray	or et al.			_	
	AB53	5,751	,154	05/19	998	Tsug	ai			_	<u> </u>
	AC53	5,793	,817	08/19	98	Wilso	on			<u> </u>	
	AD53	6,225	,848 B1	05/20	001	Tilley	et al.				
	AE53	6,313,	,685 B1	11/20	001	Rabi					
	AF53	3,614	,627	10/19	971	Runy	an et al.				
	AG53	3,940	,697	02/19	76	Morg	an				
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K	AN	<u>59</u>	Simoni, A. ei Solid-State (al., "A Circtuits	Single-Chips, IEEE, Vol	p Optic . 30, N	al Sensor with Analog N b. 7, pp. 800-806 (July 1	Memory for 1 1995).	Motion (Detection," <i>IE</i>	EE Journal of
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il	AA54	4,115,737	09/19	978	Hong	ju et al.					
1	AB54	5,710,992	01/1	998	Sawa	ada <i>et al</i> .					
	AC54	5,790,587	08/19	998	Smit	h et al.					
7	AD54	4,740,675	04/19	988	Bros	nan <i>et al</i> .					
	AE54	5,483,600	01/19	996	Wen	bach					
	AF54	6,011,435	01/20	000	Take	yabu <i>et al.</i>					
	AG54	6,321,073 B1	11/20	001	Luz e	et al.					
	AH54	6,026,286	02/20	000	Long					•	
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1	AB55	3,736,513	05/19		Wils					-
	AC55	4,488,119	12/19		Mars					
	AD55	4,633,510	12/19			ıki et al.				
	AE55	5,369,789	11/18		_	ugi et al.				
-	AF55	5,416,449	05/19		Josh				<u> </u>	
	AG55	5,438,329	08/19			touniotis et al.				
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		AC56	6,067,329		05/20			et al.					
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Page 1 of 6 APPLICATION NO. ATTY. DOCKET NO. 09/632,856 1744.0830003 **INVENTORS** SORRELLS et al. THIRD SUPPLEMENTAL **ART UNIT** FILING DATE ATION DISCLOSURE STATEMENT August 4, 2000 2634 **U.S. PATENT DOCUMENTS** EXAMINER CLASS SUB-CLASS FILING DATE INITIAL DOCUMENT NUMBER DATE NAME AA AB AC AD ΑE AF56 6,687,493 B1 02/2004 Sorrells et al. AG56 6,694,128 B1 02/2004 Sorrells et al. **AH56** 6,031,217 02/2000 Aswell et al. **AI56** 5,955,992 09/1999 Shattil **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE COUNTRY SUB-CLASS TRANSLATION Yes AJ No Yes ΑK No Yes DE AL23 DE 196 48 915 A1 06/1998 (Doc. AO59) Yes **AM** No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) ΑN iZ. English Translation of German Patent Publication No. DE 196 48 915 A1, 10 pages. AO <u>59</u> AP AQ AR

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Page 2 of 6 ATTY, DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 **FORM PTO-1449 INVENTORS** SORRELLS et al. THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT **ART UNIT** FILING DATE August 4, 2000 2634 **U.S. PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER CLASS SUB-CLASS FILING DATE DATE NAME **AA57** 5.999.561 12/1999 Naden et al. **AB57** 6.686.879 B2 02/2004 Shattil AC57 6,704,549 B1 03/2004 Sorrells et al. AD57 6,704,558 B1 03/2004 Sorrells et al. **AE57** 5,490,176 02/1996 Peltier AF57 5,970,053 10/1999 Schick et al. **AG57** 6,078,630 06/2000 Prasanna 6,600,911 B1 **AH57** 07/2003 Morishige et al. 5,179,731 01/1993 Tränkle et al. **AI57 FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER COUNTRY CLASS SUB-CLASS **TRANSLATION** DATE Yes AJ No Yes ΑK No Yes AL No Yes AM No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) ΑN AO AP AQ AR DATE CONSIDERED **EXAMINER** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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Page 3 of 6 ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 **FORM PTO-1449** INVENTORS SORRELLS et al. THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT ART UNIT **FILING DATE** August 4, 2000 2634 **U.S. PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE FILING DATE NAME CLASS SUB-CLASS 5,589,793 12/1996 **AA58** Kassapian 04/1985 **AB58** 4,510,467 Chang et al. 09/1988 AC58 4,772,853 Hart AD58 4,972,436 11/1990 Halim et al. AE58 5,012,245 04/1991 Scott et al. **AF58** 06/1995 5,422,909 Love et al. AG58 5,440,311 08/1995 Gallagher et al. 5,926,513 07/1999 Suominen et al. **AH58 AI58** 5,995,030 11/1999 Cabler **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL CLASS SUB-CLASS **TRANSLATION** DOCUMENT NUMBER DATE COUNTRY Yes ΑJ No Yes ΑK No Yes AL No Yes ΑM No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) ΑN AO AP AQ AR DATE CONSIDERED **EXAMINER** 11/07/01 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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Page 4 of 6 ATTY. DOCKET NO. APPLICATION NO. 1744.0630003 09/632,856 **FORM PTO-1449 INVENTORS** SORRELLS et al. THIRD SUPPLEMENTAL **FILING DATE ART UNIT** INFORMATION DISCLOSURE STATEMENT August 4, 2000 2634 **U.S. PATENT DOCUMENTS** EXAMINER INITIAL **DOCUMENT NUMBER** DATE NAME **CLASS** SUB-CLASS FILING DATE **AA59** 6,047,026 04/2000 Chao et al. 6,049,573 04/2000 AB59 Song AC59 6,076,015 06/2000 Hartley et al. 11/2000 AD59 6,144,331 Jiang 10/1991 AE59 5,058,107 Stone et al. AF59 5,757,858 05/1998 Black et al. 6,531,979 B1 03/2003 AG59 Hynes **AH59** 6.018.262 01/2000 Noro et al. AI59 4,761,798 08/1988 Griswold, Jr. et al. **FOREIGN PATENT DOCUMENTS EXAMINER** SUB-CLASS DOCUMENT NUMBER COUNTRY CLASS TRANSLATION INITIAL DATE Yes ΑJ No Yes ΑK No Yes AL No Yes AM No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AN AO AP 1 AQ AR **EXAMINER** DATE CONSIDERED EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation in conformance and not considered. Include copy of this form with next communication to Applicant.

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	AA60	5,982,315	11/1999	Bazarjani et al.			
	AB60	6,459,721 B1	10/2002	Mochizuki et al.			
	AC60	6,151,354	11/2000	Abbey			
*	AD60	6,169,733 B1	01/2001	Lee			,
	AE60	6,363,262 B1	03/2002	McNicol			
	AF60	6,697,603 B1	02/2004	Lovinggood et al.			
	AG60	5,282,222	01/1994	Fattouche et al.			
	AH60	5,949,827	09/1999	DeLuca et al.			
	A160	6,014,176	01/2000	Nayebl et al.			
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	AB61	5,760,632	06/1998	Kawakami et al.			
	AC61	6,160,280	12/2000	Bonn et al.			
	AD61	5,481,570	01/1996	Winters			
	AE61	5,745,846	04/1998	Myer et al.			
	AF61	5,345,239	09/1994	Madni et al.			
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FORM PTO-1449 **FOURTH SUPPLEMENTAL**

Page 1 of 4 APPLICATION NO. 09/632,856 ATTY. DOCKET NO. 1744.0630003 INVENTORS Sorrells et al. FILING DATE

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E	AA62	4,441,080	04/1984	Saari			
	AB62	4,873,492	10/1989	Myer			
	AC62	5,697,074	12/1997	Makikallio et al.			
	AD62	5,784,689	07/1998	Kobayashi			
	AE62	6,335,656 B1	01/2002	Goldfarb et al.			
	AF62	6,690,232 B2	02/2004	Ueno et al.			
	AG62	5,636,140	06/1997	Lee et al.			
	AH62	6,366,622 B1	04/2002	Brown et al.			
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K	AA63	4,250,458	02/1981	Richmond et al.			
	AB63	5,760,629	06/1998	Urabe et al.			
	AC63	6,084,465	07/2000	Dasgupta			
	AD63	6,204,789 B1	03/2001	Nagata			
·	AE63	6,064,054	05/2000	Waczynski <i>et al</i> .			
	AF63	5,218,562	06/1993	Basehore et al.			
	AG63	5,239,496	08/1993	Vancraeynest			
	AH63	5,896,304	04/1999	Tiemann et al.			
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